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AMERICAN MUSEUM OF NATURAL HISTORY

The Saginaw Valley Collection



FRAGMENTS OF ANCIENT POTTERY FROM SAGINAW VALLEY, MICHIGAN.

BY

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Guide to the American Museum

Harlan I. Smith

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FOBEAR MOUND No. 1.

W. J. Melchers, Photo.

THE CULTURE OF THE PEOPLE ONCE INHABITING
A LIMITED AREA NEAR SAGINAW, MICHIGAN,
AS ILLUSTRATED BY MATERIAL IN THE AN-
THROPOLOGICAL DEPARTMENT OF THE AMER-
ICAN MUSEUM OF NATURAL HISTORY.

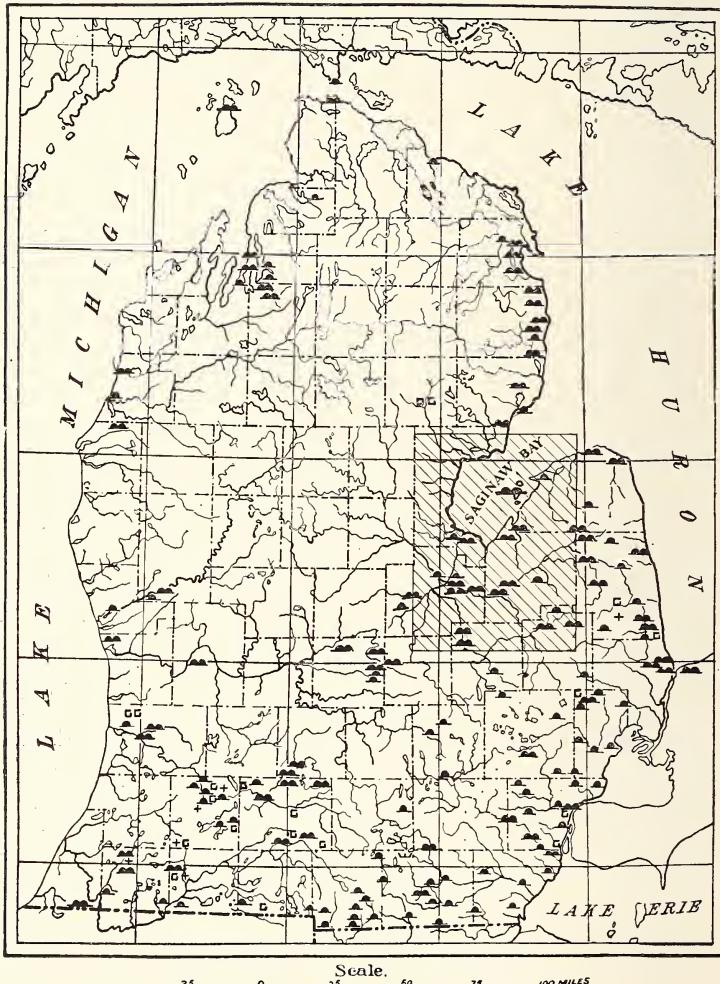
BY HARLAN I. SMITH,

Assistant Curator of Archæology.

THE rude archæological objects found in the Saginaw valley, Michigan, and exhibited in the American Museum of Natural History show that the prehistoric people who lived in that area were largely occupied with striving for the necessities of life. The region, although not at all desolate, was still too far north to support a civilization that would leave traces of a culture so largely given to art and ritual as those to be found in Mexico, the Southern States or even in the Ohio valley. Such a collection of rather rude implements and objects has value, however, in that it gives evidence regarding the lives of the early inhabitants of the country.

The objects from the Saginaw valley were found in such places that we now know where there were a number of rather important villages and a still larger number of small villages or camp sites, besides what were probably scattered habitations and burial-places—all of the early people of this region. It is quite evident from areas where certain stray objects were found, and from the scarcity of other evidences in such areas, that the people also made trips to points remote from the villages, probably for fishing and hunting, the gathering of fruits and roots or the securing of material out of which to make arrow-points and pipes; and that the objects were lost on the way. It would seem that the character of the country, with the scattered distribution of its products, was the cause of the segregation of the people into small villages, and possibly of their establishing small outlying camps for the purpose of being, at certain seasons, near points suitable for such occupations as are above noted.

The importance of the collection exhibited in these cases is chiefly that it indicates the character of the culture of the people, the location of their habitations, burial-places, caches and



▲ = MOUND.
 □ = INCLOSURE.
 + = UNDEFINED ANTIQUITIES
 X = CEMETERY.

A larger map of the cross-lined area will be found on page 8.

mounds, as well as that it shows something of their resources, industries and customs. It is undoubtedly the largest archæological collection from the Saginaw valley, and was made and presented to the Museum by the writer, whose investigations of the region, although supplemented by later work, were chiefly accomplished during the period from 1883 to 1891. Practically all the objects to be found on the surface of the particular sites from which the



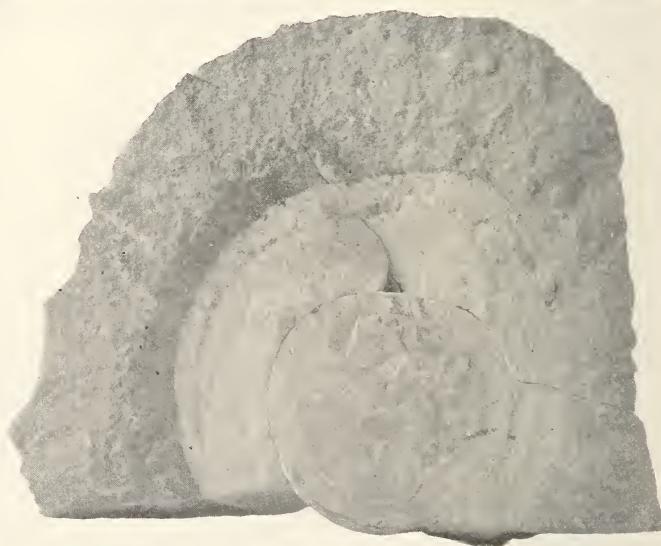
W. Orchard, Photo.

Wedge Shaped. CELTS OR CHISELS. Adze Shaped.
About $\frac{2}{3}$ Natural Size.

collection was obtained have been secured; but it is probable that further search, especially below the surface and in the neighboring fields, would bring to light other specimens of similar nature.

The Saginaw valley, including the entire area draining into Saginaw Bay, occupies the east-central portion of the southern peninsula of Michigan. It is a well-watered, level country, formerly covered by dense forests of pine, oak, elm, ash, maple, hickory and other trees. The lowlands are occupied by swamps, which in places are largely grown up with wild rice, known to botanists as

Zizania aquatica Linn, a staple produced by nature in such abundance that it was of great importance to the primitive people of the region. The streams which were of the most importance to the prehistoric inhabitants of the valley were the Saginaw river and its main tributaries, including the Shiawassee, Flint, Bad, Cass, Tittabawassee and their branches, while the Pigeon, Sebewaing, Kawkawlin and Rifle were not unimportant. Bordering the lower



W. Orchard, Photo.

CHERT NODULE IN LIMESTONE.

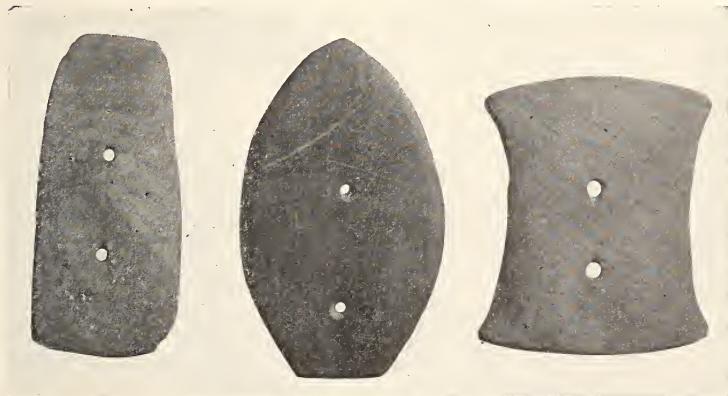
From Bay Port Quarries.

courses of the rivers there are numerous bayous with low sand ridges scattered over the land between them. At the head waters the streams flow more swiftly and undercut their banks, and large bayous and swamps are less frequent.

Chert or impure flint was extensively quarried and chipped into implements by the prehistoric inhabitants of the valley, and in the chipped implements found on the village sites and hunting-grounds this material largely predominates. A specimen of limestone of Subcarboniferous age bearing a nodule of chert, obtained at the modern quarries at Bay Port, Michigan, is illus-

trated on the preceding page, and may be seen in the case. This outcrops in a nearly circular line cut by the head waters of the Cass, Shiawassee and Tittabawassee and intersecting Saginaw Bay near Point Lookout and Bay Port.

When white men first visited this region, it was inhabited by the Ojibwa Indians. The name of this tribe is variously spelled, as Chippewa, Otchipwe, etc. Their descendants preserve traditions that the Sauk or Sac Indians formerly occupied the valley and were driven out by the Ojibwa and their allies, while the Sac and Fox Indians of Iowa, for their part, have traditions to the same effect. A collection from these Ojibwa Indians is shown



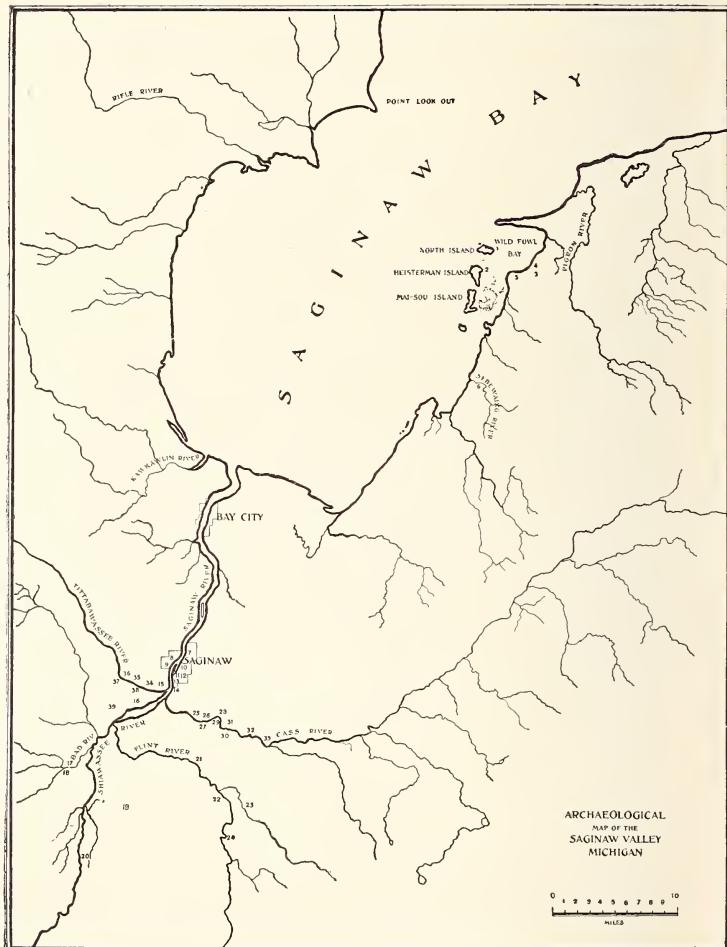
W. Orchard, Photo.

SLATE TABLETS POSSIBLY ORNAMENTS.

About $\frac{2}{3}$ Natural Size.

in another part of the Museum (Hall No. 106, on the ground floor). They were found subsisting on a variety of natural products, chief among which were wild rice, maple sugar, squash, corn, wild fruits and game.

The prehistoric villages were located along the streams, because of the importance of water, wild rice, fish and the land animals which frequented the river banks for food or visited them for water. Furthermore, the canoe was an easier means of transportation than the trail, and even trails were more easily formed along the ridges parallel to the rivers or along the banks than elsewhere. The outcrops of chert and pipestone also are



ENLARGED MAP OF THE CROSS-LINED AREA ON THE MAP OF THE STATE
ON PAGE 4.

ARCHÆOLOGICAL MAP OF THE SAGINAW VALLEY,
MICHIGAN, SHOWING THE PRINCIPAL
ANCIENT SITES.

SAGINAW BAY, EASTERN SHORE, HURON COUNTY.

1 North Island Workshops.	4 Bay Port Cache.
2 Heisterman Island Village Site.	5 Sharpsteen Village Site.
3 Bay Port Village Site.	6 Sebewaing Village Site.

SAGINAW RIVER VALLEY, SAGINAW COUNTY.

7 Hoyt Camp Site.	12 Esterbrook Camp Site.
8 Wright Graves.	13 Mobray Camp Site.
9 Saginaw Graves.	14 Ka-pay-shaw-wink Village Site.
10 Germain Village Site.	15 Green Point Mounds.
11 Ayres Camp Site.	

SHIAWASSEE RIVER VALLEY.

16 Merrill Cache.	19 Albee Workshop.
17 St. Charles Graves.	20 Chesaning Mounds.
18 St. Charles Mounds.	

FLINT RIVER VALLEY.

21 Foster Village Site.	23 Stewart Cache.
22 Peonagowink Village Site.	24 Morse Cache No. 1.

CASS RIVER VALLEY.

25 Wille Cache.	30 Cass Village Site.
26 Fisher Village Site.	31 Bow Village Site.
27 Fobear Mounds.	32 Cook Village Site.
28 Andross Village Site.	33 Simons Prehistoric Cemetery.
29 Lull Earthwork.	

TITTABAWASSEE RIVER VALLEY.

34 Little Camp Site.	37 Frazier Village Site.
35 Morgan Camp Site.	38 Tittabawassee Village Site.
36 Andrews Workshop.	39 German Camp Site.

W. Orchard, Photo.

HAMMER-STONES.
About $\frac{1}{2}$ Natural Size.



exposed by the rivers, while in other places they are covered with soil. From such exposures canoes could easily descend to villages along the rivers, while to carry the material by trail to inland settlements would have been laborious. The evidences from the numerous village sites and the burial-places, mounds and other remains, indicate that the conditions of life in prehistoric times were similar to those which existed when the Indians were first met by white men. Fragments of pottery; pebbles which have been burned and broken, probably while used as supports for the round-bottomed pottery cooking-vessels; ashes and charcoal; the broken bones and shells of animals; arrow, knife, spear, scraper and drill points of chert; points made of bone for arrows or awls; celts or chisels; hammer-stones; grooved axes; ornamental objects, etc.—all are to be seen in this case. A number of such objects when found on the surface of the ground at a particular place, especially if pottery is present, constitute the evidence which proves the spot to have been a village site. Charcoal and ashes alone are not conclusive proof of a village site, since such remains may have been left by white people of recent times.

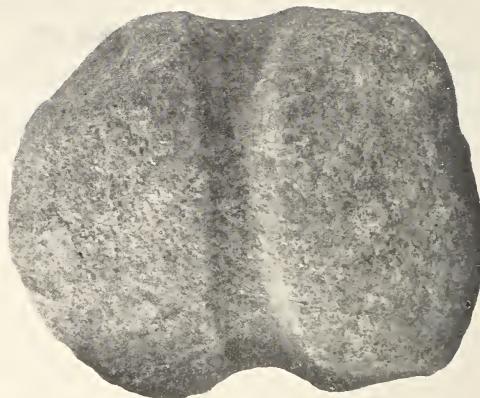
PARTICULAR SITES.

North Island Workshops.—At the western limit of Wild Fowl Bay is North Island, on the northern side or highest part of which chert implements were found in all stages of manufacture, from the nodular masses occurring in the substratum of the entire island to the finished chipped points for spears, arrows, knives and similar objects. Here also were found chips, flakes and other discarded fragments of the same material,—the waste from the processes of manufacture,—indicating the site of an ancient workshop. Chipped implements of other material than chert have not been obtained at this locality.

Heisterman Island Village Site.—The highest portion of Heisterman Island is the northeastern side and there the sand ridges slope to the marshes known as the Middle Grounds. These marshes are frequented by fish, and wild fowl assemble here in large numbers to feed on the wild rice. The rice alone, which does not border other portions of the island, may have

W. Orchard, Photo.

GROOVED STONE AXES AND GROOVED STONE HAMMER.
About $\frac{1}{2}$ Natural Size.



determined the site of this prehistoric village. The limestone bearing chert suitable for the manufacture of arrow-points underlies the island and outcrops on its western shore within easy access of this site. Hammer-stones, chipped points for arrows, knives, spears, drills, etc., and chipped flint implements resembling small hoes were gathered here, as well as fragments of pottery and a piece of a pottery pipe. Many of the potsherds are neatly ornamented, some by incised designs, others by designs made by pressing twisted cord or twine into the clay while it was soft. Another important locality is the one known as Bay Port Village Site, from which the grooved stone hammer used for our illustration was taken.

Near some of the villages hidden deposits or caches have been found, fourteen in all having been discovered in the Saginaw valley. The specimens from a number of these may be seen in this collection. That the quarries from which the Indians obtained their raw material have yet to be found is possibly because signs of them may have been obliterated by modern quarrymen or by the grinding of the ice or the beating of the surf against the lake-shore outcrops during the many years which must have elapsed between the time when the Indians abandoned the quarries and the time when the first archaeologist saw the site. The caches seem to indicate that expeditions were made to these quarries and a large number of the partly finished forms were chipped, and that they were taken to the vicinity of the permanent camp and cached in the earth, where the stone would be kept from becoming weathered.

Bay Port Cache.—One cross-section of a chert nodule and forty-seven "turtle-back" blank forms, constituting a cache, were found two feet below the surface, in the muck jungle, about a hundred feet from the shore of Wild Fowl Bay, and a quarter of a mile east of the wharf at Bay Port. The place is between the bay and the sand ridge on which the Bay Port village site is located. The specimens in the cache were found in one long row, overlapping one another somewhat like shingles on a roof. It is probable that the material of which they were made was obtained near the spot, since the outcrop of Subcarboniferous rock, which occurs for some distance along the beach westward from the wharf, bears concretions the material of which is similar

to that of the cache specimens. There are several outcrops of this rock within a mile, especially along the beach to the west. In this cache there were some blades of peculiar form, having a straight beveled edge on one side. It seems probable that this was caused by flaking the pieces for turtle-backs from a round concretion. The first flake removed would be symmetrical, but each of the succeeding flakes, if the material were used without waste, would have one side beveled where the one before it had been removed from the nodule. Not all of the flakes had been subjected to sufficient chipping to remove the signs of this bevel.



W. Orchard, Photo.

SEGMENT OF NODULE, RUDE BLANK AND CHIPPED POINT.

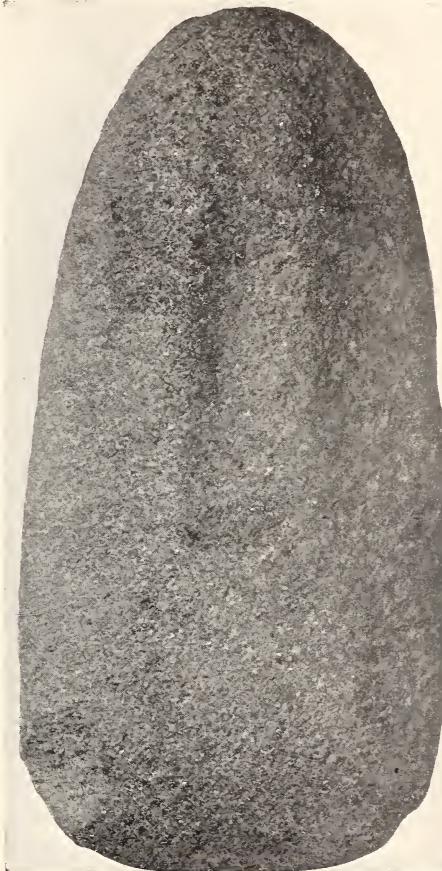
From the surface of the Esterbrook Village Site.

About $\frac{3}{4}$ Natural Size.

More or less evidence has been found of the existence of a number of village sites, burial-places, mounds and prehistoric battle-grounds from Bay Port southward along the shore of Saginaw Bay, on the western shore of the bay and along the lower course of Saginaw River. There are Ojibwa traditions also which tend to confirm the archaeological evidence. From such sites the quantity of material in this collection is not sufficient to warrant a detailed description of it in this place. This, however, is given in a summary of the *Archaeology of Saginaw Valley, Michigan*, published in the *American Anthropologist* beginning with Part II, 1901. The fragments of pottery, arrow-points and

other objects found on the surface of the sand ridges along the eastern side of Saginaw River in the city of Saginaw, indicate a number of village sites which were separated by bayous. From one of the latter series there has been obtained one of the so-called "bird-shaped" stones which is evidently in process of manufacture. The greater portion of the surface shows the pits caused by "pecking," as it is technically called, that is, the bruising of the surface of the stone and the brushing away of the crushed particles until it has assumed the shape desired. At either side of what was to have been the head, the next process in the manufacture had been taken up, as is shown by the rubbed surfaces. It is probable that this rubbing was done with a rather coarse stone, and that the implement would have been finished by polishing.

Mobray Village Site.—This site, which is on the east side of the river in South Saginaw, had on its surface a sandstone pipe decorated with neatly arranged pits. Rock which outcrops in the bottom of the Cass river was mentioned as



W. Orchard, Photo.

"FLUTED" OR CORRUGATED STONE CHISEL.

"Fluted" celts are found only in Michigan and Wisconsin and this form is rare. Collected by Mr. Albert Barkels. Natural Size.

early as 1859 in the State geological reports as being material used by the Indians of the region for their pipes. It is possible that this pipe was made of similar material which was brought down the Cass by canoe, that being the most natural way; an idea which is strengthened by the fact that the early pioneers depended on the canoe, at first, for transportation along the same route.

Ka-pay-shaw-wink Village Site.—This is a large village site on the east bank of the Saginaw river, just below the junction of the Tittabawassee and Shiawassee rivers. The ar-

chaeological evidence found at this locality coincides with the Ojibwa traditions, which state that in ancient times a great village of the Sac Indians was located here. A cache consisting of fifty-nine blades was found about a foot below the surface at this spot. The implements found in it are leaf-shaped, average about one and one-fourth inches in length and are of chert. One of the blades had been specialized by notching at the base. This cache is known as Golson Cache No. 2. There are two large dome-shaped mounds on the western side of the river, opposite the Ka-pay-shaw-wink village site, and it is related by the Indian traditions that a part of the exterminated Sacs were buried in them. They are known as the Green Point mounds.

Wille Cache.—A cache consisting of two celts and about 175 chipped blades of triangular shape averaging an inch and a half in length was found in a small marsh hole or periodic pond near the north bank of the Cass river about three miles from Saginaw. Specimens are shown, also, from various sites on the Shiawassee



W. Orchard, Photo.

PIPE MADE OF SANDSTONE.

Collected by John Rambow on the Mabray Camp Site. Natural Size.

and Flint river, but, as in the case of many of the other sites in the region, they must be here passed without further mention.

Fobear Mound No. 1.—A group of four mounds was found on the land of Mr. Leonard Fobear on the south side of the Cass river nearly opposite the Wille cache, or about four miles above Saginaw. One of these was thoroughly explored in 1894 and a number of skeletons, besides fragments of pottery, chips of chert and other objects of like nature were found in it. Persons not acquainted with archaeological field-work often ask how the explorer knows where to dig, hence a brief outline of the beginning of operations at this mound may be of some interest. On



Harlan I. Smith, Photo.

THE EASTERN OF THE GREEN POINT MOUNDS FROM THE SOUTH.

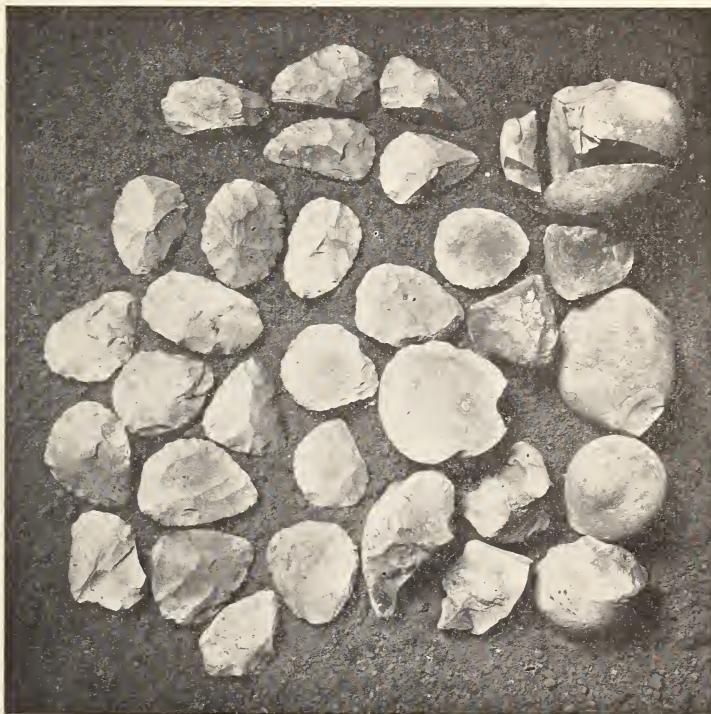
first visiting this locality, the author viewed it from several directions and felt that the mound was of such slight elevation and so much like the natural knolls in the same meadow with it that it might be only a natural rise in the ground; but, on walking over the middle of it, he noticed in the short meadow grass some yellow soil which had been thrown up out of a woodchuck burrow. Such material must have come from below the reach of the plow, since all the surface soil was black. In the yellow earth were several fragments of pottery, but such bits are to be found anywhere in the surface soil of the neighboring fields. A human tooth lying among the potsherds suggested the idea that a human



SKELETONS AS FOUND IN FOBEAR MOUND No. 1.

W. J. Melchers, Photo.

skeleton might be underneath, and that the knoll was in reality a burial mound and not a natural elevation, for human teeth have not yet been brought up from the interior of natural knolls. On excavating the mound, several human skeletons were found near the base of the burrow. Thus the wood-chuck, of interest to the student of mammals, was of assistance to a worker in another department of science.



W. Orchard, Photo.

CASS CACHE No. 2.

Cass Cache No. II.—This cache, consisting of 22 blanks and 12 pieces of nodules of chert, very similar to that of the Subcarboniferous outcrop, was found just below the surface of the earth, near the south bank of the Cass river, at a point about four miles above Saginaw. The 12 pieces of raw material lay in a pile and the 22 blades were spread out near them. Chips and



THE ANDROSS URN.

W. Orchard, Photo.

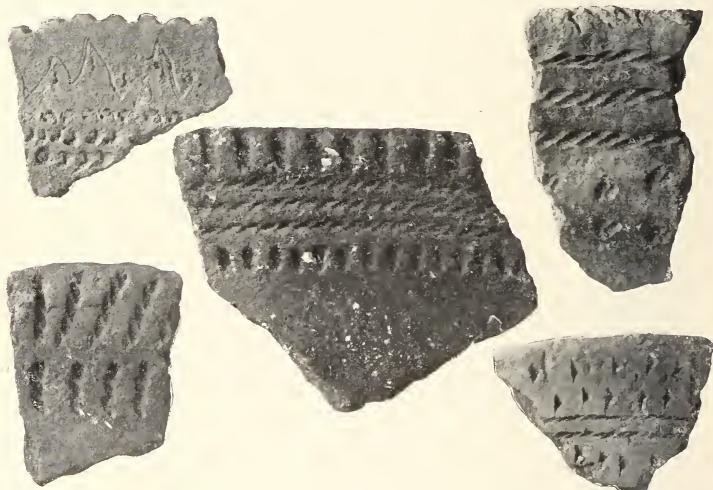
flakes, also, were abundant near the cache, and it is possible that this was a workshop, the raw material being piled in one place and the worked rock in another, beside it. The blanks found here included both forms described under Bay Port Cache.

Andross Village Site.—This site is at Bridgeport, about six miles from Saginaw, and is one of the many which have been found on the Cass river. It is worthy of note, because it furnished the large pottery urn which is illustrated on page 20, and which is, perhaps, the most interesting specimen in the collection. While a pioneer was plowing on the site, the foot of one of his oxen suddenly sank into a hole. On investigation, the farmer found that the ox had broken through the bottom of an urn which had been turned mouth downward over the head of a human skeleton. This urn is three feet nine inches in circumference and one foot eight inches in height, but before it was broken it must have been at least two feet high. It is reported that a number of similar urns have been found near Detroit, and one was dug up at Point Lookout on the west side of Saginaw Bay; but unfortunately all these specimens have been broken or lost, so that the Andross urn is probably unique.

Andrews Workshop.—On the Tittabawassee river, as on the other streams, we find a number of village sites and burial-places. One is on a sand ridge east of the river, near Paine's Station, about five miles west of Saginaw. Here the wind had blown under some buildings and removed the light sand, leaving a deep hole of considerable area. Over the surface of the sand remaining in this hole were left wagon-loads of chips and flakes of chert, arrow-points in various stages of manufacture, small hammer-stones and a few other objects, all indicating that the place was once a workshop. The hammer-stones are merely pebbles that have been battered in pounding, or pebbles which have been provided with a pit on either side, so that the thumb and middle finger may grasp them more securely. These were used in breaking up the pieces of chert and bringing them somewhat into the form of the chipped points for arrows and similar implements. It is probable that a bone implement was used for the finer flaking necessary to finish the object.

Some copper beads which were found on this site are of particular interest, since they show that the native copper from Lake

Superior, was hammered into the form of beads which are altogether different from those made of the thin rolled copper furnished the Indians by the white people during more recent times. These beads had evidently been at this place for a long time, a circumstance indicated by the corroded condition of the copper. The copper salts due to corrosion are of a preservative nature and have kept from total destruction portions of the cord on



W. Orchard, Photo.

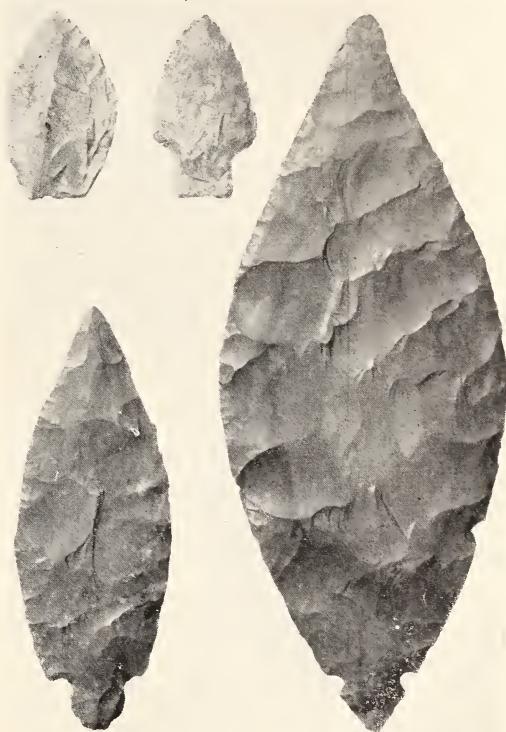
FRAGMENTS OF POTTERY FROM FRAZIER VILLAGE SITE.

Nearly Natural Size.

which the beads had been strung. Had these beads been of shell or stone, or of any other material that did not produce such a salt, the cord would not have been preserved, and we should not have known that it was of vegetable fibre, but might quite properly have supposed that the beads had been strung upon a thong of buckskin.

Frazier Village Site.—This was a very large village site and was located on the south side of the Tittabawassee river near Paine's Station, about five miles above Saginaw. It is mentioned in the Ojibwa traditions as being the place where a large village was captured by the invading force. At this spot some fragments of pottery were secured which have decorations made with cords

like those of the Heisterman Island pottery. A mound of unusually large size is said to have been located on this site and the many human skeletons found here are supposed to have been those of the unfortunate Sacs. This mound has been entirely removed for the commercial purpose of obtaining the sand of which it was constructed. It seems possible that the site was really a burial ground in a natural knoll of sand. A cache consisting of over 300 pieces was found about a foot below the surface on this site. In the cache, which was located within a few hundred feet of the Frazier mound, were found four varieties of blades: First, large, black, leaf-shaped implements, about 8 inches long, made of black, concretionary chert and having a very delicate stem formed at the tip of the base by two notches; Second, similar implements, about 3 inches long, showing concretionary structure very plainly, the centre being black and hard, the tips grading off by successive rings to a comparatively soft yellowish chert; Third, small forms made of yellow chert and



W. Orchard, Photo.
REPRESENTATIVE SPECIMENS FROM FRAZIER CACHE No. 1
About $\frac{1}{2}$ Natural Size.

evidently intended for specialization; Fourth, a few of the latter specialized by notching. Objects made of the same material are only rarely found in the region, hence these were probably brought from a distance. A cache, a few feet from the preceding, consisted of one large, black, leaf-shaped implement, similar to those of the last mentioned and surrounded, it is said, by thirteen rubbed stones.

The foregoing description contains but a general indication of the archæology of the Saginaw valley, as outlined by a single collection. Those who care to pursue the inquiry further are referred to the more detailed descriptions published in the *American Anthropologist*, though even these are not supposed to exhaust the theme presented by this limited area alone. Thorough explorations in the mounds, graves and village sites are necessary to supplement what is now known from the surface evidence and from the few explorations which have been made beneath the surface.

Of the archæology of many other parts of Michigan still less is known, and it is of the greatest importance that thorough work should be done in several centres of culture, not only in the Saginaw valley, but also in other parts of Michigan and in fact throughout the Central States, in order to solve the enigmas that have long puzzled the students of the early Americans. The Mississippi and St. Lawrence valleys are rich in archæological material, but it is almost useless to indulge in speculations derived from scattered bits of evidence from widely separated parts of the country. The time has come when our studies must be based upon exhaustive and detailed investigations made in a scientific manner, at one place. These may then be compared with the results of similar studies carried on at all other parts of the region of which knowledge is desired and substantial progress will be made toward unraveling the history of the early Indian tribes in this country.

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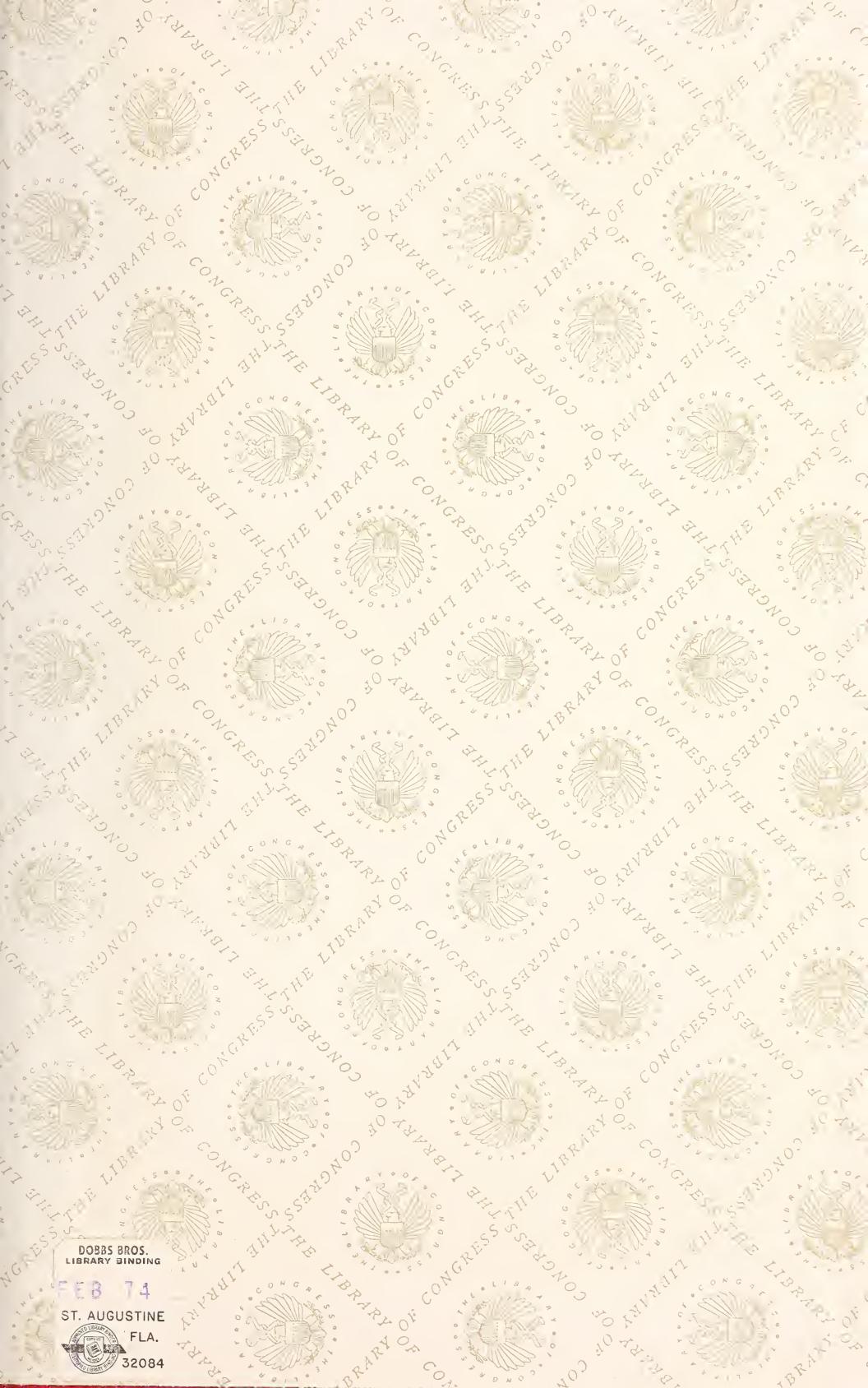
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